DEVELOPING AN ASSET MANAGEMENT FRAMEWORK FOR WATER RESOURCE MANAGEMENT IN KAZAKHSTAN

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Introduction. The project's main objective is the development and application of an asset management framework that institutionalizes and operationalizes infrastructure management and decision making (investment, operation, maintenance) in the context of achieving Integrated Water Resource Management (IWRM) objectives [1,2].

Materials and methods. A conceptual asset management framework was developed for water resources infrastructure that includes nine distinct but interrelated components (Table 1).

Table 1: Asset management framework

Water resources knowledge management framework
Water Resource Strategy and Policy
Stakeholder Management
Ownership, Responsibility, Authority and Resources
Inventory of the water resource and its infrastructure
Condition and Performance of a water resource and its infrastructure
valuations and Financial Review
Monitoring, Control and Knowledge Management
Internal Process Development and Review
Risk Assessment, Management, and Emergency Response

The testing and further refinement is conducted by inviting asset management experts, professionals and professional organizations and institutions to participate in workshops, interviews and surveys.

Results and discussion. The first iteration of the testing and refine process has resulted in a preliminary model for assessing asset management maturity in organizations. It is anticipated that this framework could significantly alter the understanding of managing public infrastructure assets in Kazakhstan.

Conclusions. The initial model of an asset management framework was developed for building organizational knowledge and capacities which will subsequently incorporate advances and innovations in information technology, intelligent hardware and software packages and systems, Geo-information systems, Telecommunication systems and technologies.

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References.

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2. British Standards Institute. (2008). Publicly Available Specification 55 PAS 55-1:2008.